=> d his; d iall

(FILE 'HOME' ENTERED AT 10:14:26 ON 20 MAR 2006)

FILE 'CAPLUS' ENTERED AT 10:15:06 ON 20 MAR 2006

FILE 'REGISTRY' ENTERED AT 10:15:18 ON 20 MAR 2006

0 S LIPONIC ACID/CN L10 S LIPIC ACID/CN L2

2 S LIPOIC ACID/CN L3

FILE 'CAPLUS' ENTERED AT 10:16:10 ON 20 MAR 2006

3656 S L3 OR (LIPOIC(W)ACID)/IA L4

L5 289302 S PURIFN/IA

L6 2 S L5 (4W) L4

99229 S (ADSORBENT OR ABSORBENT)/IA L7

L8 1 S L6 AND L7 L9 11 S L4 AND L7 SELECT L9 9 PN

FILE 'WPIDS' ENTERED AT 10:19:27 ON 20 MAR 2006

L10 1 S E1

L10 ANSWER 1 OF 1 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN

ACCESSION NUMBER:

2003-269349 [27]

DOC. NO. CPI:

C2003-070658

TITLE:

Method of treating cyclization hydrolysis effluent and

re-using resource in lipoic acid production.

WPIDS

DERWENT CLASS:

A97 D15 E13

INVENTOR(S):

CHEN, J; CHENG, Z; WEI, R; CHEN, Z

PATENT ASSIGNEE(S):

(UYNA-N) UNIV NANJING COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO	KIN	D DATE	WEEK	LA	PG	MAIN	IPC	
CN 1375463 CN 1161282		20021023 20040811	: :	*			7001-2	-

APPLICATION DETAILS:

PATENT NO KIND		APPLICATION	DATE		
CN 1375463	Α	CN 2002-112931	20020427		
CN 1161282	C	CN 2002-112931	20020427		

PRIORITY APPLN. INFO: CN 2002-112931 20020427

INT. PATENT CLASSIF.:

MAIN: C02F001-28

SECONDARY: C02F003-02

BASIC ABSTRACT:

1375463 A UPAB: 20030429

NOVELTY - The recovery and utilization method of waste water produced from the production of lipoic acid includes:

(i) pre treating the waste water,

(ii) using methyl alcohol or ethyl alcohol as desorption agent to desorb and regenerated the macroporous adsorption resin in which the lipoic acid is adsorbed, then washing the resin with water.

DETAILED DESCRIPTION - The recovery and utilization method of waste water produced from the production of lipoic acid includes:

- (i) pretreating the waste water, under the conditions of temperature of 0-50 degreesC and flow rate of 0.5-3.0 BV/h making the waste water pass through adsorption column in which the styrene-divinylbenzene copolymer macroporous adsorption resin is held, and making the lipoic acid be adsorbed on the resin; and
- (ii) using methyl alcohol or ethyl alcohol as desorption agent to desorb and regenerated the macroporous adsorption resin is which the lipoic acid is adsorbed, then washing the resin with water.

The CODcr of treated waste water can be reduced to below 100 mg/L, and the lipoic acid content can be reduced to below 0.5 mg/L, and the lipoic acid can be recovered.

Dwg.0/0

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FILE SEGMENT: CPI FIELD AVAILABILITY: AB

MANUAL CODES: CPI: A04-B10; A04-C04; A12-W11J; D04-A01F; E07-B03